

Introducing a new 3300 System Monitor with Serial and Dynamic Data Interface

ynamic data is essential to diagnose rotating machinery problems. Dynamic data can aid in machinery balancing and alignment and can indicate shaft crack, rub, oil whirl and other problems.

The integration of rotating machinery information into a plant's data network can also increase the effectiveness of your predictive maintenance program. For instance, many machinery problems can be identified by trending vibration together with other plant process parameters.

We are proud to introduce the 3300/03 System Monitor with two independent computer interfaces to make data acquisition even easier. The first is a Serial Data Interface (SDI), which allows your 3300 System to communicate via RS-232 or RS-422 links with Programmable Logic Controllers, Process Control Systems, Distributed Control Systems or PC-based Control Systems. The second is a Dynamic Data Interface (DDI), which allows you to conveniently connect your 3300 System directly to a personal computer running Bently Nevada DDM Software.

Serial Data Interface

The SDI option can gather and store monitored "static" values and alarm status values for each channel in the instrument rack. Alarm setpoints are also



available when Modicon Modbus® protocol is selected. This information can then be integrated into your plant's network for efficient machinery condition indication, display and trending.

The SDI implements two standard protocols, Modicon Modbus® and Allen Bradley DFI, which are switch-selectable on the interface assembly.

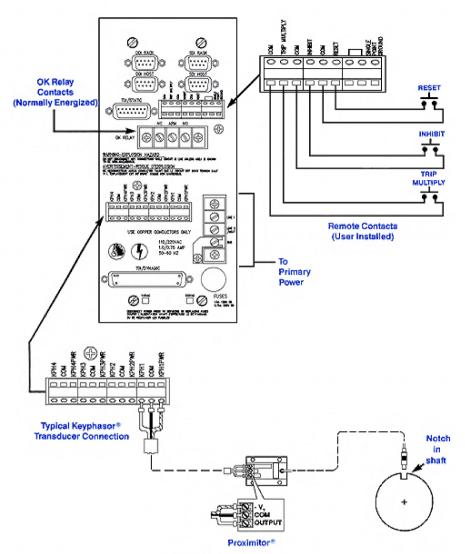
Each protocol has its own unique characteristics, but the data that is transferred over the interface link is similar. Since these protocols are industry standards, compatibility is assured in the majority of applications.

Both protocols require a supporting device at the receiving side. Modicon Modbus® allows daisy-chaining of racks. Therefore, only one supporting device is required. Allen Bradley DF1 does not allow daisy-chaining of racks and a supporting device is required for each rack used.

Dynamic Data Interface

The DDI is a computer interface designed to be used in conjunction with Bently Nevada's Dynamic Data Manager host computer and software package. The DDI performs data acquisition, temporary data storage and computer communications to the DDM host computer.

All of these functions are performed by a circuit board located within the 3300/03 System Monitor. This advanced design allows direct connection of your 3300 System to the DDM host computer, eliminating the need for an external Communications Processor. For transient data, a dynamic transducer output connection is available for use with a Transient Data Manager® (TDM) Communications Processor.



Field Wiring Diagram

Hardware configurations

The original functions of the System Monitor remain unchanged. The Serial and Dynamic Data Interface hardware are individual circuit boards which plug directly into the System Monitor. All of the necessary rear panel connections for both the SDI and DDI are included with the standard 3300/03 System Monitor. The 3300/03 can be ordered with only the SDI hardware installed or with both the SDI and DDI hardware installed.

The front panel for the 3300/03 System Monitor differs from the previous System Monitor in the following ways: A third LED, the Data Interface OK indicator, has been added. This LED will turn OFF when either the SDI or DDI hardware is not functioning properly. Also two additional buffered Keyphasor® signal outputs have been added. This allows you to easily connect up to four different Keyphasor signals directly into diagnostic or predictive maintenance equipment.

Applications

When using the 3300/03 System Monitor, a process control computer can provide monitored value displays, channel alarms, channel alarm setpoints,

channel status, trending and extensive event logging. At the same time, valuable dynamic data is directly available to a Dynamic Data Manager System. With this new feature, your plant operators have direct access to the machinery information they require, while your 3300 System is part of an on-line Rotating Machinery Information System.

For additional information on this product or on other Bently Nevada products and services, contact your nearest sales representative.

Modbus® is a registered trademark of Modicon Incorporated.

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